S.A.S. GOVERNMENT DEGREE COLLEGE
(AFFILIATED TO ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM)
Phone: 08818 252189, E-mail: narayanapuram.jkc@gmail.com

NARAYANAPURAM, W.G DISTRICT-534406

Study Tour to P B SIDDHARTHA COLLEGE OF ARTS & SCIENCE

MoU's Activity organized by Departments of Physics - SAS Government Degree College Narayanapuram

Permission Letter

23.08.2025
Narayanapuram

To
The Principal
SAS Govt. Degree College
Narayanapuram

Respected Sir,

Subject: Request for Permission to Visit Science Laboratories at PB Siddhartha Arts & Science (A) College Vijayawada as a Study Tour – Req - Reg

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We respectfully request you to kindly grant permission for the First- and Second-Year B.Sc. Computer Science and Physics (Major/Minor) students of our college to visit the Science Laboratories on 23rd August 2025.

A total of around 20 students, along with staff members, will be participating in this visit. The purpose of this visit is to enhance practical knowledge and provide students with exposure to laboratory equipment and experimental procedures relevant to their academic curriculum.

We assure you that all students will maintain discipline and follow the rules and regulations of the laboratories during the visit.

We kindly request you to consider our application and grant us permission for the same.

Thanking you.

Yours sincerely,

B Venkatesulu Reddy
Lecturer in Physics
SAS GDC Narayanapuram

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NARAYANAPURAM, ELURU DISTRICT-534406

From
The Principal
SAS Government Degree College
Narayanapuram, Eluru (Dt), A.P.

To
The Principal
P.B Siddhartha College of Arts & Science (A),
Vijayawada, A.P.

Sub: Request for permission to visit Physics lab & Computer lab your institute as part of an Students Exchange programme / Educational tour. Reg.

Sir,

I hope this letter finds you well. I am writing on behalf of S A S Government Degree College Narayanapuram, which is located in a rural area and primarily serves students from rural backgrounds. As part of our efforts to provide a comprehensive educational experience, we are planning an Student Exchange/Educational tour to expose our students to a more diverse learning environment and to give them the opportunity to explore academic opportunities beyond our region.

It has been planned by the Science Departments for Organising Educational tour. In this regard, we request you to kindly permit first & Second year B.Sc Computer Science/Physics (Major/Minor) students around (20 Including staff) of our college to visit Science laboratories at 23rd -Aug-2025

Kindly consider our request and please forward your acceptance to the following mail ID narayanapuram.jkc@gmail.com/b.venky.45@gmail.com at the earliest and do needful in the matter.

Thanking you sir,

Yours Faithfully

Principal

The Department of Physics and Computer Science organized a study visit at P B Siddhartha (A) college of arts and Science along with I and II year B.Sc students on 29-04-2023.

Major Observations:

1. Students has learned the experimental verification related to the Optics and light experiments.
2. Newtons Ring experiment
3. Resolving power of prism
4. Diffraction Grating
5. Resolving power of Hollow prism
6. Boys method
7. Digital Library
8. Computer lab
9. Guest Lecture etc.

DETAILED PRACTICAL REPORT ON OPTICS AND LIGHT EXPERIMENTS

Department: Physics / Computer Science
Class: B.Sc. First & Second Year
Date of Laboratory Visit: 23rd August 2025
Number of Students: Approximately 20 (including staff)

Introduction

The laboratory visit was organized to provide students with hands-on experience and deeper understanding of fundamental concepts in Optics and Light. Through this session, students were able to observe, perform, and analyze various experiments that demonstrate the behavior of light and optical instruments.

Objectives
To understand the principles of Optics through practical experiments
To verify theoretical concepts using experimental methods
To develop skills in handling laboratory equipment
To enhance analytical and observational abilities
Experiments Conducted
1. Newton's Ring Experiment

Students learned how to determine the wavelength of monochromatic light using interference patterns. Circular rings were observed due to the interference of light between a plano-convex

lens and a glass plate. Measurements of ring diameters helped in calculating the wavelength.

2. Resolving Power of Prism

This experiment demonstrated how a prism separates light into its component wavelengths. Students studied the dispersive power of the prism and learned how closely spaced spectral lines can be distinguished.

3. Diffraction Grating

Students observed diffraction patterns produced when light passes through a grating. They calculated the wavelength of light using the grating formula and understood the concept of constructive and destructive interference.

4. Resolving Power of Hollow Prism

In this experiment, students analyzed the resolving ability of a hollow prism filled with a liquid. It helped them understand how refractive index influences resolution and light dispersion.

5. Boy's Method

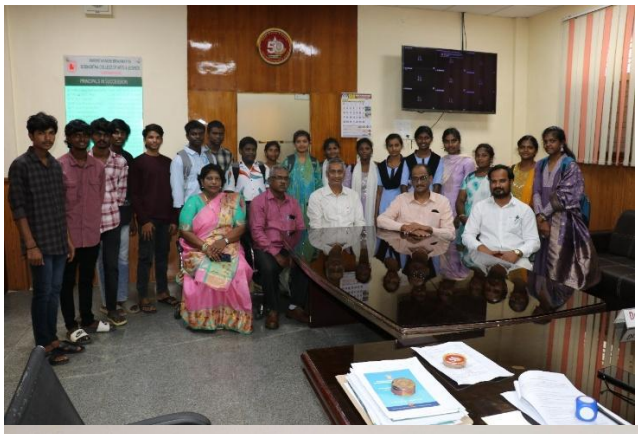
Students performed Boy's method to determine the wavelength of light using interference. This experiment provided insights into precision measurement techniques and interference phenomena.

Learning Outcomes
Students gained practical knowledge of interference and diffraction
They understood how to calculate wavelength using different methods
They learned the importance of precision in measurement
They developed skills in handling optical instruments
They connected theoretical concepts with real-world observations
Conclusion

The laboratory session was highly beneficial in strengthening students' understanding of Optics and Light. The experiments provided clear visualization of abstract concepts and improved their practical skills. Overall, the visit was successful in achieving its educational objectives.

Signature of Faculty: _____
Head of Department: _____
Seal: _____

Photos



STUDENT FEEDBACK FORM
(Laboratory Visit – Optics and Light Experiments)

Department: Physics / Computer Science
Class: B.Sc. I & II Year
Date of Visit: 23rd August 2025

Student Name: _____
Roll Number: _____

Please rate the following aspects of the laboratory visit:

(Tick ✓ the appropriate option)

S.No	Criteria	Excellent	Good	Average	Poor
1	Organization of the visit	☐	☐	☐	☐
2	Clarity of explanations	☐	☐	☐	☐
3	Understanding of experiments	☐	☐	☐	☐
4	Availability of equipment	☐	☐	☐	☐
5	Guidance from staff	☐	☐	☐	☐
6	Overall learning experience	☐	☐	☐	☐

Experiments Understanding Level:

(Tick ✓ the appropriate option)

Experiment	Well Understood	Partially Understood	Not Understood
Newton’s Ring	☐	☐	☐
Resolving Power of Prism	☐	☐	☐
Diffraction Grating	☐	☐	☐
Resolving Power of Hollow Prism	☐	☐	☐
Boy’s Method	☐	☐	☐